

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

DRAFT

Conditional Major, Construction / Operating

Permit: F-08-026

American Metal Products, Inc.

Covington, Ky 41011

08/12/08

Yelena Goldin, Reviewer

SOURCE ID: 21-117-00183

AGENCY INTEREST: 100667

ACTIVITY: APE20080001

SOURCE DESCRIPTION:

American Metal Products, Inc. is a steel fabrication and welding facility that will be relocating their operations from Cincinnati, OH to Covington, KY. Services provided include precision laser cutting, shearing, punching, bending and forming, complex welding assemblies, and painting. American Metal Products, Inc. applied for a minor permit on May 16, 2008.

Potential emissions of MIBK, a hazardous air pollutant (HAP), from the new facility will exceed 10 tons per year and 25 tons per year for combined HAPs. American Metal Products accepted permit limitations of source-wide HAPs emissions of less than 9 tpy of individual HAP and 22.5 tpy of total HAPs to be classified as a Conditional Major.

COMMENTS:

The company is going to use Paint Booth (EP#01) for their painting operations. Filters that are going to be used for capture of particulates are estimated to be 90% efficient and the transfer efficiency of the spray gun is 60%. In the application, the company indicated gas metal arc welding (GMAC) as a separate emission point. However, since potential emissions from that are very low (total HAPs are 0.02tpy and PM10 is 0.28tpy), welding operations were included in the insignificant activities.

Applicable regulations:

401 KAR 63:020, Potentially Hazardous Matter or Toxic Substances

401 KAR 59:010, New Process Operations

40 CFR Part 63 NESHAP subpart HHHHHH, Paint stripping and miscellaneous surface coating operations doesn't apply since the company does not spray any of the targeted HAPs.

The Division for Air Quality (Division) has performed air dispersion model screening of potentially hazardous substances that may be emitted by the facility based upon the process rates, material formulations, stack heights and other pertinent information provided by the applicant. Based upon this information, the Division has determined that the conditions outlined in this permit will assure compliance with the requirements of 401 KAR 63:020.

The following is a summary of the potentially hazardous substances upon which screening was performed, the modeled worst case impacts, and the level of concern (LOC) that would have triggered additional review and/or more detailed modeling. Since only worst case screening modeling was performed, these results do not, nor are they intended to, portray actual risk.

Unit(s)	Substance	Modeled Impact	Level of Concern
Paint Booth	MIBK	8.7 $\mu\text{gram}/\text{meter}^3$	300 $\mu\text{gram}/\text{meter}^3$
	Toluene	2.23 $\mu\text{gram}/\text{meter}^3$	500 $\mu\text{gram}/\text{meter}^3$
	Ethylbenzene	0.13 $\mu\text{gram}/\text{meter}^3$	100 $\mu\text{gram}/\text{meter}^3$
	Xylene	0.74 $\mu\text{gram}/\text{meter}^3$	10 $\mu\text{gram}/\text{meter}^3$
	Methanol	0.45 $\mu\text{gram}/\text{meter}^3$	400 $\mu\text{gram}/\text{meter}^3$

EMISSION AND OPERATING CAPS DESCRIPTION:

The paint booth is subject to the opacity and particulate mass emission rate standards specified in 401 KAR 59:010, New Process Operations. The opacity of emissions from a control device or stack shall not exceed 20 percent based on a 6 minute average (24 observations at 15 second intervals). The emission rate of particulate matter from a control device or stack shall not exceed 2.34 pounds per hour. The emission rate of individual hazardous air pollutants (HAP) shall not exceed 9.0 tons for any twelve (12) consecutive month period. These emission limits shall preclude the applicability of 40 CFR 63, Subpart M - NESHAPs for surface coating of miscellaneous metal parts and products. The emission rate of volatile organic compounds shall not exceed 18 tons for any twelve (12) consecutive month period. This emission limit shall preclude the applicability 401 KAR 59:225, New miscellaneous metal parts and products surface coating operations, applicable to affected facilities commenced on or after February 4, 1981 and located in a county or portion of a county designated as nonattainment for ozone in 401 KAR 51:010.

PERIODIC MONITORING:

Compliance with the opacity standard will be demonstrated by the permittee conducting weekly visible emission observations of the stacks. If visible emissions are seen, the permittee will be required to either shut the process down and take corrective actions or perform an EPA Method 9 reading to determine the opacity of emissions. If the opacity determined by the Method 9 reading is less than 20 percent, the process may continue to operate, otherwise the process must be shut down and repairs to control equipment initiated.

Compliance with the mass standard will be assumed when filters and particulate control equipment are in place and operating efficiently. The permittee will be required to monitor filter condition weekly and record filter replacements, including the date and time of the replacement.

The permittee will be required to monitor and record the gallons of coating as applied used on a monthly basis. Additionally the permittee will be required to monitor and record the gallons of individual materials used, which contain VOC and HAP on a monthly basis. The permittee shall calculate and record the monthly and 12-month rolling total emissions of individual HAP (MIBK) and VOC.

OPERATIONAL FLEXIBILITY: N/A

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.

The Division for Air Quality (Division) has performed air dispersion model screening of potentially hazardous substances that may be emitted by the facility based upon the process rates, material formulations, stack heights and other pertinent information provided by the applicant. Based upon this information, the Division has determined that the conditions outlined in this permit will assure compliance with the requirements of 401 KAR 63:020.